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Case# 5420

REMARKS35 USC Section 112, 2nd Paragraph Rejection:

Claims 8 and 9 were rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. The Examiner states: (a) that the phrase "10% or greater" is a relative property which renders the claim indefinite; (b) that the property is not defined by the claim; (c) that the specification does not provide a standard for ascertaining the requisite degree; (d) that one of ordinary skill in the art would not be reasonably apprised of the scope of the invention; and (e) that Applicants do not provide a reference point from which to measure an increase of 10%.

Applicants have amended claims 8 and 9 to clarify that the "10% or greater" improvement in absorption capacity describes an improvement in absorption capacity exhibited by the treated nonwoven fabric over the untreated nonwoven fabric (not exposed to the air impingement process). In other words, the nonwoven fabric is compared both before (untreated fabric) and after (treated fabric) exposure to the air impingement process. The support for these claims is shown in Example 3 and in Table 2 on pages 17 -18 of the patent application. Accordingly, Applicants respectfully believe that the rejection of claims 8 and 9 has been overcome.

35 USC Section 102 Rejections:

Claims 1-5 and 13-19 were rejected under 35 USC Section 102 (e) as being anticipated by Groitzsch et al. (US Patent No. 6,448,462 B2).

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Groitzsch is concerned with the creation of a spun-bond nonwoven fabric comprising continuous multi-component fibers that are at least partially split along their length (Abstract and col. 5, lines 53).

The Examiner contends that the fabric of Groitzsch exhibits the same improved aesthetic and performance characteristics claimed by Applicants (col.1, lines 31-36). The Examiner also submits that Groitzsch teaches: (a) a combination of polyethylene terephthalate and nylon 6,6 (col. 5, lines 30-32) in the same proportions as claimed by Applicants (col. 5, lines 45-47); (b) a base weight of 100 g/m² (col. 1, line 43); (c) Applicants claimed moisture vapor transmission rate (col. 3, lines 22); and (d) an optional dye to be added to the fabric (col. 4, lines 5-6).

With respect to claims 16-18, the Examiner submits that Groitzsch teaches: (a) a full bath impregnation of dye (col. 3, lines 58-60) which would inherently allow the dye to reach the interior of the fibers and would result in increased uniform dyeing and (b) subjecting the web to impingement by high pressure fluid jets (col. 3, lines 16-17) which opens up the dense fiber-to-fiber construction of the fabric and creates available space which allows dyes to further penetrate to fibers deep within the treated dyed fabric.

The Examiner has treated claims 19-29 as intended use claims.

Applicants have amended claim 1 to include the limitation of claim 6 (but with a new Kawabata value). Claim 6 is directed to the ratio of fabric weight to Bending Stiffness when tested according to the Kawabata Pure Bending Tester, which is part of the Kawabata Evaluation System described in great detail on pages 11-14 of the patent application. The higher the ration of fabric weight to Bending Stiffness, the better the drape and flexibility of the sample. Tables 1A and 1B show results of the Kawabata Pure Bending Test for standard (not

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point bonded) 160 g/m² nonwoven fabric both before and after the air impingement treatment. The results show that the untreated nonwoven fabric exhibits values ranging from 56.0 to 139.1. In contrast, the treated nonwoven fabric exhibits values ranging from 187.1 to 495.4. Additionally, Table 4 shows the results of the Kawabata Pure Bending Test for point bonded 100g/m² nonwoven fabric both before and after the air impingement treatment. The results show that the untreated nonwoven fabric exhibits values ranging from 58.3 to 204.1. In contrast, the treated nonwoven fabric exhibits values ranging from 680.3 to 1219.5.

Thus, Applicants' treated nonwoven fabric clearly exhibits far superior flexibility and drape than the untreated fabric disclosed in the Groitzsch reference. Applicants wish to reiterate (see patent application - bottom of page 5 and 3rd paragraph on page 11) that the untreated nonwoven fabric used in the Examples section of the patent application was obtained from Firma Carl Freudenberg, the same assignee as the Groitzsch reference. Thus, the untreated nonwoven fabric was already exposed to one treatment of impingement by high pressure fluid jets (as disclosed by Groitzsch at col. 3, lines 16-17 and as disclosed by Applicants in the specification on page 5 - that US Patent Nos. 5,899,785 and 5,970,583 assigned to Freudenberg also describe the manufacturing processes of this nonwoven fabric).

Thus, Applicants' treated nonwoven fabric has been exposed, in essence, to two Impingement processes – a first high pressure fluid jet process performed by Groitzsch during the manufacturing of the untreated nonwoven fabric and a second air impingement treatment according to the process of the current invention (a patented process described in detail in commonly assigned US Patent Nos. 4,837,902; 4,918,785; 5,822,835; and 6,178,607). The Examples section of the patent application clearly compares these two fabrics: (1) the untreated nonwoven fabric exposed only to a first high pressure fluid jet process during the manufacturing of the fabric and (2) the treated nonwoven fabric exposed to a first high pressure fluid jet

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process during the manufacturing of the fabric and then exposed second to the air impingement treatment according to the process of the current invention.

Accordingly, Applicants respectfully contend that adding the limitation of claim 6 (slightly modified) to claim 1 clearly distinguishes Applicants' invention over the Groitzsch reference because Applicants have clearly demonstrated that the Groitzsch fabric fails to exhibit the improved properties of flexibility and drape exhibited by Applicants treated nonwoven fabric. Thus, since claims 2-5 and 13-19 depend from currently amended claim 1, Applicants respectfully maintain that this rejection has now been overcome.

35 USC Section 103 Rejections:

Claims 6-9 and 11-12 were rejected under 35 USC Section 102 (e) as being anticipated by or, in the alternative under 35 USC Section 103(a) as obvious over Groitzsch et al. (US Patent No. 6,448,462 B2).

Claim 10 was rejected under 35 USC 103 (a) as being unpatentable over Groitzsch et al. (US Patent No. 6,448,462 B2).

The Examiner submits that Groitzsch does not utilize Applicants' claimed testing methods to test bending stiffness ratio, increased thickness, or moisture absorption. However, the Examiner submits that Groitzsch teaches that its fabric has improved drape to conform and adapt to different body shapes (col. 1, lines 34) and improved moisture absorption (col. 2, lines 29-31 and 42-43). Based on Groitzsch's teachings and the fact that Groitzsch's web is formed from the same combination of polymeric materials and is produced by the same method as Applicants' invention, it is the Examiner's position that Groitzsch's web inherently possesses the same properties as Applicants' claimed web.

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The Examiner further contends that in the alternative, it would have been obvious to a person having ordinary skill in the art to increase the stiffness ratio, thickness, moisture absorption, and moisture vapor transmission rate. These modifications would have been motivated by the desire to increase the ability of Groitzsch's bandage to treat larger wounds.

With regard to claim 10, the Examiner submits that Groitzsch teaches the nonwoven fabric to have a basis weight of 150 g/m² and that it would have been obvious to a person having ordinary skill in the art to increase the size of the fabric to about 160 g/m² motivated by the desire to render Groitzsch's bandage suitable to treat a larger wound.

Applicants' have cancelled claim 6 and rely, in part, on the discussion presented above to reiterate Applicants position that the Examples section of the patent application clearly illustrates that Groitzsch's untreated nonwoven fabric fails to exhibit the same characteristics exhibited by Applicants' treated nonwoven fabric. Applicants respectfully reiterate that the untreated nonwoven fabric utilized in the Examples section of the patent application is substantially the same as the nonwoven fabric of the Groitzsch reference. Thus, Applicants treated nonwoven fabric clearly exhibits superior results when compared to the untreated nonwoven fabric of Groitzsch.

Furthermore, other test results, in addition to the Kawabata data discussed above, clearly illustrate that Applicants' treated nonwoven fabric exhibits improved aesthetic and performance characteristics, such as thickness, moisture absorption capacity, and moisture vapor transmission rate, over the untreated nonwoven fabric described by Groitzsch. Applicants treated nonwoven fabric exhibits: (a) a 10-15% increase in thickness over the untreated nonwoven fabric of Groitzsch (see Example 2); (b) at least a 10% increase (and up to a 30%

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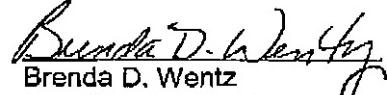
increase} in absorption capacity over the untreated nonwoven fabric of Groitzsch (see Example 3 and Table 2); and (c) at least an 8% increase (and up to a 19% increase) in moisture vapor transmission rate over the untreated nonwoven fabric of Groitzsch (see Example 6 and Table 5).

Accordingly, Applicants respectfully contend that one of ordinary skill in the art would not have been motivated to modify the nonwoven fabric of Groitzsch with Applicants' patented air impingement process to created the claimed nonwoven fabric having improved aesthetic and performance characteristics of flexibility, drape, thickness, moisture absorption capacity, and moisture vapor transmission rate. As such, Applicants respectfully request that the rejection of claims 6-9 and 10-12 be withdrawn.

In view of the above amendments and remarks, reconsideration of pending claims 1-5 and 6-29 is earnestly solicited.

Respectfully requested,

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